AMENDMENTS TO THE CLAIMS

The following listing of claims replaces all previous claim listings and versions:

1. (Currently Amended) ~~A dye-in-polymer (DIP) medium for the~~ A recording layer ~~of~~ for write-once-read-many (WORM) optical disks with fluorescent reading, ~~containing~~ comprising:

a fluorescent dye capable of absorbing recording laser radiation, present in an amount of about 0.1 weight percent to 10 weight percent of the recording layer;

a non-fluorescent dye capable of absorbing recording laser radiation and transforming the absorbed radiation to heat;

a compound that generates free radicals to decolorize the fluorescent dye, non-fluorescent dye, or both as a result of decomposition under heating induced by laser-radiation absorption by the fluorescent dye; and

a film-forming polymer,

wherein the compound that generates free radicals is selected from the group consisting of azo-bisisobutyronitrile, p-bromobenzene diazohydroxide, triphenylmethylazobenzene, diazobenzoyl, nitrosoacetanilide, peroxides, and a mixture thereof, and the recording layer is 100 nm to 1000 nm in thickness.

2. (Currently Amended) The ~~DIP medium for the~~ recording layer according to claim 1, wherein said fluorescent dye is chosen from one or more of xanthene dyes of the eosin and rhodamine groups, acridine, oxazine, azine, perylene, violanthrone, cyanine, phthalocyanine dyes, indigoid colorants and porphyrins.

3. (Cancelled)

4. (Currently Amended) The ~~DIP medium for the~~ recording layer according to claim 1, wherein said film-forming polymer is chosen from the group of resins consisting of cellulose esters, cellulose ethers, acrylic resins, vinyl resins, and a mixture thereof.

5. (Currently Amended) The ~~DIP medium for the~~ recording layer according to claim 1, wherein the non-fluorescent dye has an absorption spectrum range overlapping with the absorption and fluorescence spectrum ranges of the fluorescent dye and with the maximum absorption or fluorescence spectrum range of the fluorescent dye.

6. (Currently Amended) The ~~DIP medium for the~~ recording layer according to claim 1, wherein the non-fluorescent dye has an absorption spectrum range overlapping the absorption and fluorescence spectrum range of the fluorescent dye.

7. (Previously Presented) A method of obtaining a single-layer optical WORM disc, which comprises:

dissolving a fluorescent dye capable of absorbing recording laser radiation; a compound that generates free radicals to decolorize the fluorescent dye as a result of decomposition under heating induced by laser-radiation absorption by the fluorescent dye; and a film-forming polymer, in an organic solvent chosen from the group consisting of alcohols, ketones, amides, sulfoxides, ethers, esters, halogenated aliphatic hydrocarbons and aromatic solvents to form a composition, or

introducing the dye, compound and polymer into the solvent as microcapsules less than 0.2 micron in size to form a composition; and

covering said composition by spin coating, roller coating or dip coating on a substrate selected from the group consisting of glass, polymethylmethacrylate, polycarbonate, and polyethylene terephthalate disc,

wherein the dye is present in an amount of about 0.1 weight percent to 10 weight percent of a recording layer and the compound that generates free radicals is selected from the group consisting of azo-bisisobutyronitrile, p-bromobenzene diazohydroxide, triphenylmethylazobenzene, diazobenzoyl, nitrosoacetanilide, peroxides, and a mixture thereof.

8. (Currently Amended) A method of obtaining a single-layer optical WORM disc, comprising creation of a recording layer from two sub-layers, a lower sub-layer ~~containing~~ comprising fluorescent dye present in an amount of about 0.1 weight percent to 10 weight percent of the recording layer, and an upper sub-layer ~~containing~~ comprising a non-

fluorescent dye capable of absorbing recording laser radiation and transforming the absorbed radiation to heat and a substance generating free radicals to decolorize the fluorescent dye, non-fluorescent dye, or both at high temperature.

9. (Currently Amended) A method of obtaining a single-layer optical WORM disc, comprising creation of a recording layer from two sub-layers, an upper sub-layer ~~containing~~ comprising fluorescent dye present in an amount of about 0.1 weight percent to 10 weight percent of the recording layer, and a lower sub-layer ~~containing~~ comprising a non-fluorescent dye capable of absorbing recording laser radiation and transforming the absorbed radiation to heat and a substance generating free radicals to decolorize the fluorescent dye, non-fluorescent dye, or both at high temperature.

10. (Currently Amended) A method of obtaining a multilayer WORM disc by consecutive bonding of single-layer discs obtained according to claim 7, one to another, ~~forming~~ to form a multilayer system with two or more recording layers, in which the recording layers alternate with separating layers of substrate~~, wherein the recording layers comprise a fluorescent dye, capable of absorbing recording laser radiation, present in an amount of about 0.1 weight percent to 10 weight percent of the recording layer, a non-fluorescent dye that absorbs recording laser radiation and transforms a portion of the absorbed radiation to heat, and a compound capable of generating free radicals to decolorize the fluorescent dye, non-fluorescent dye, or both as a result of decomposition under heating induced by laser radiation absorption by the fluorescent dye~~.

11. (Cancelled)

12. (Currently Amended) The ~~DIP medium for the~~ recording layer according to claim 1, wherein the content of said compound that generates free radicals, in the recording layer ranges from about 0.1 percent to 20 percent.

13. (Currently Amended) The ~~DIP medium for the~~ recording layer according to claim 1, wherein the peroxides are selected from the group consisting of benzyl peroxide and tert-dibutyl peroxide, and a combination thereof.

14. (Currently Amended) The ~~DIP medium for the~~ recording layer according to claim 4, wherein the cellulose esters are selected from the group consisting of nitrocellulose, cellulose acetate, cellulose acetate butyrate, and a combination thereof.

15. (Currently Amended) The ~~DIP medium for the~~ recording layer according to claim 4, wherein the cellulose ethers are selected from the group consisting of methyl cellulose, ethyl cellulose, butyl cellulose, and a combination thereof, and the vinyl resins are selected from the group consisting of polyvinyl acetate, polyvinyl butyral, polyvinyl acetyl, polyvinyl alcohol, polyvinyl pyrrolidone, and a combination thereof.

16. (Currently Amended) The ~~DIP medium for the~~ recording layer according to claim 4, wherein the acrylic resins are selected from the group consisting of polymethylmethacrylate, polybutyl acrylate, polymethacrylic acid, polyacryl amide, polyacrylonitrile, and a combination thereof.

17-19. (Cancelled)

20. (Currently Amended) [[A]] The recording layer ~~comprising the DIP medium~~ according to claim 1, wherein the recording layer is 200 nm to less than 500 nm in thickness.

21. (Currently Amended) The ~~DIP medium of~~ recording layer according to claim 1, further comprising a compound that can be used to lower the decomposition temperature of the compound that generates free radicals.

22. (Currently Amended) The ~~DIP medium of~~ recording layer according to claim 21, wherein the compound that lowers the decomposition temperature comprises a zinc, lead, or cadmium salt of an aliphatic acid; urea; or ethanolamine, or a combination thereof.

23. (Currently Amended) The ~~DIP medium of~~ recording layer according to claim 21, further comprising a compound that prevents free radical oxygen deactivation.

24. (Currently Amended) The ~~DIP medium of~~ recording layer according to claim 23, wherein the compound comprises one or more of n-butylamine, dimethylaminoethyl methacrylate, diethyl-n-butylphosphine, or isoamyl 4-dimethylaminobenzoate.